



# **SOUTH WILLAMETTE** **Street Improvement Plan**

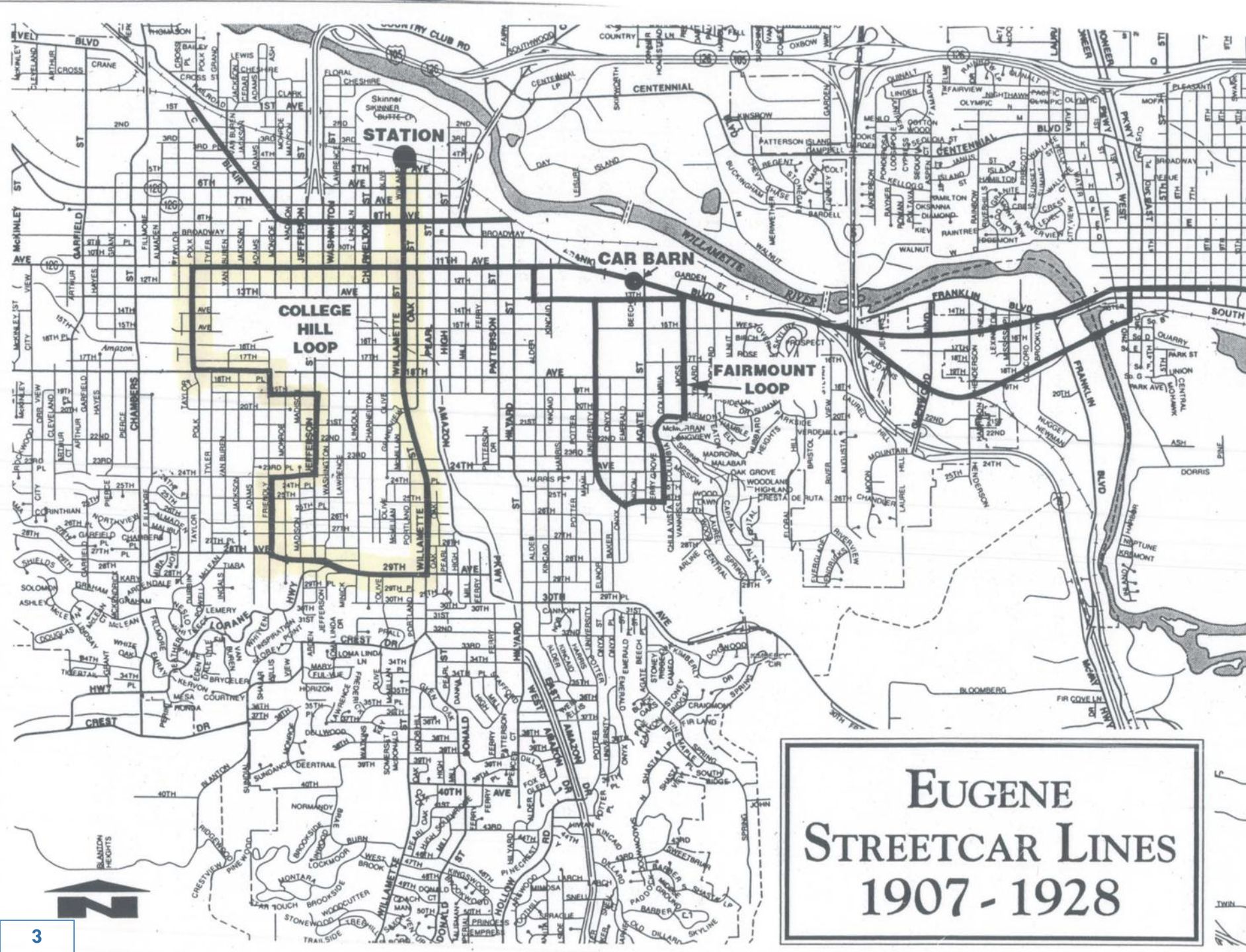
## Evaluating the Alternatives

2/27/2013

Community Forum #2







# EUGENE STREETCAR LINES 1907 - 1928



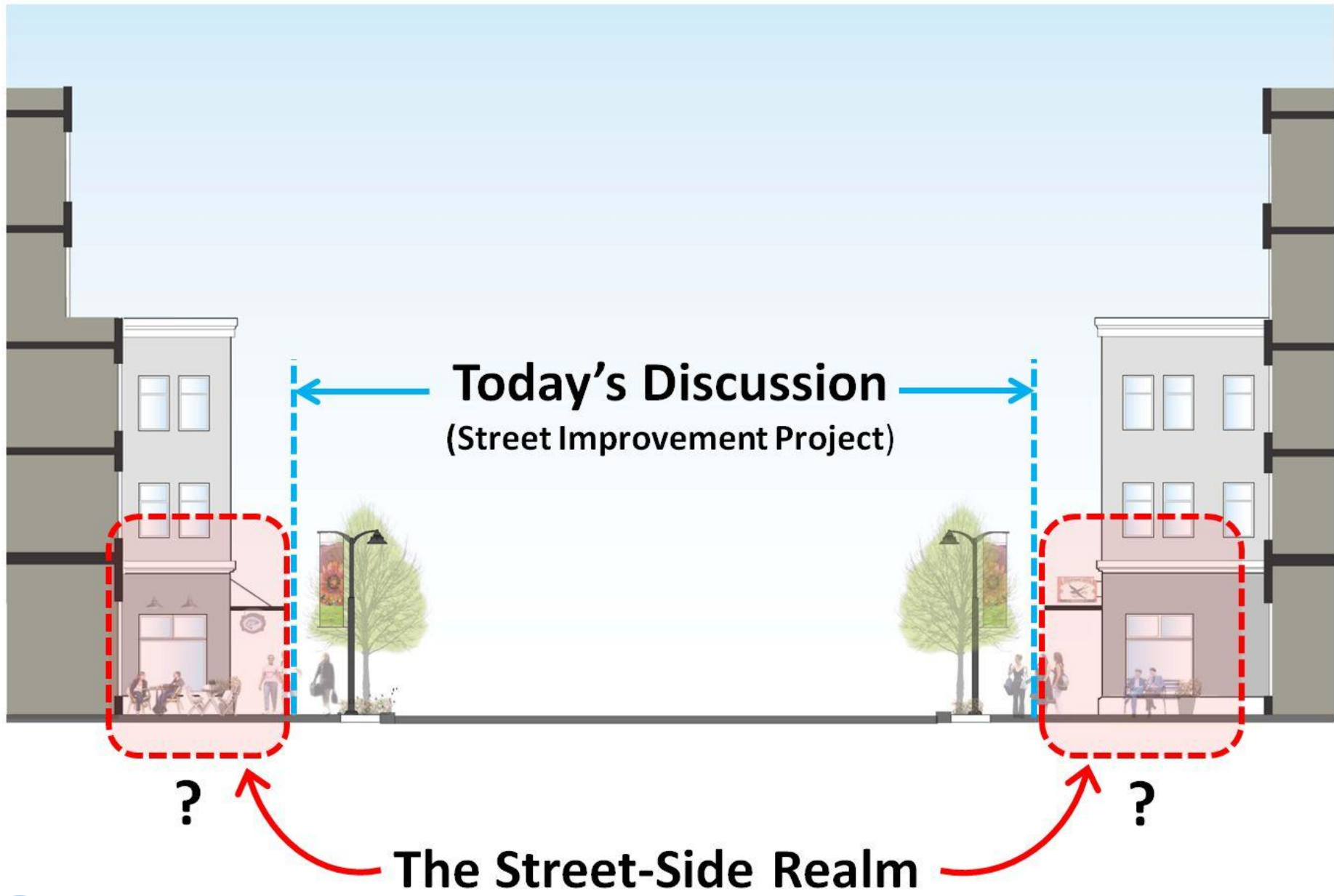




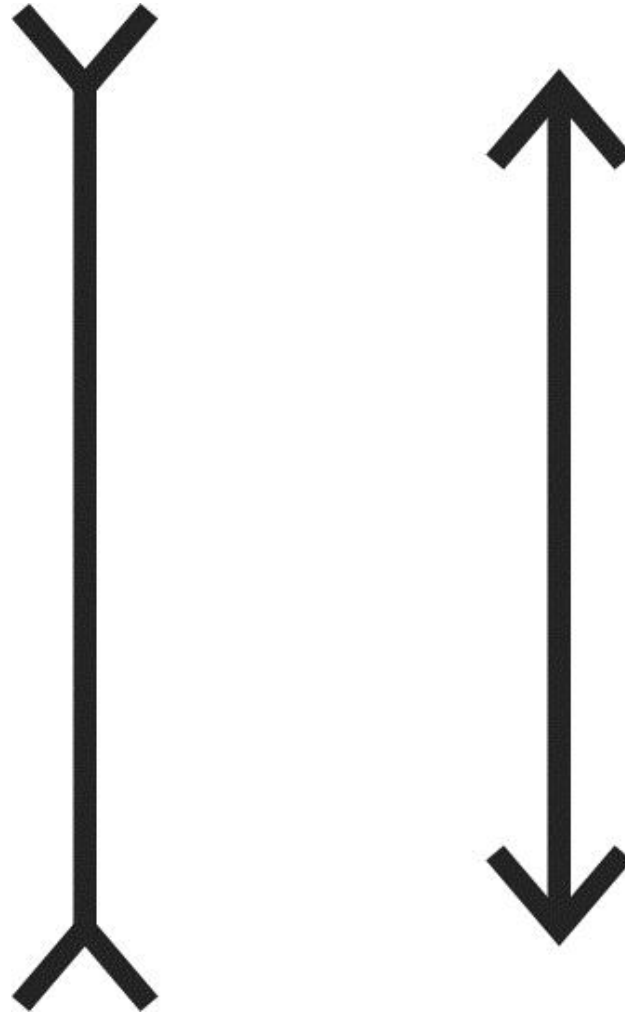
Lane County Historical Museum



Lane County Historical Museum

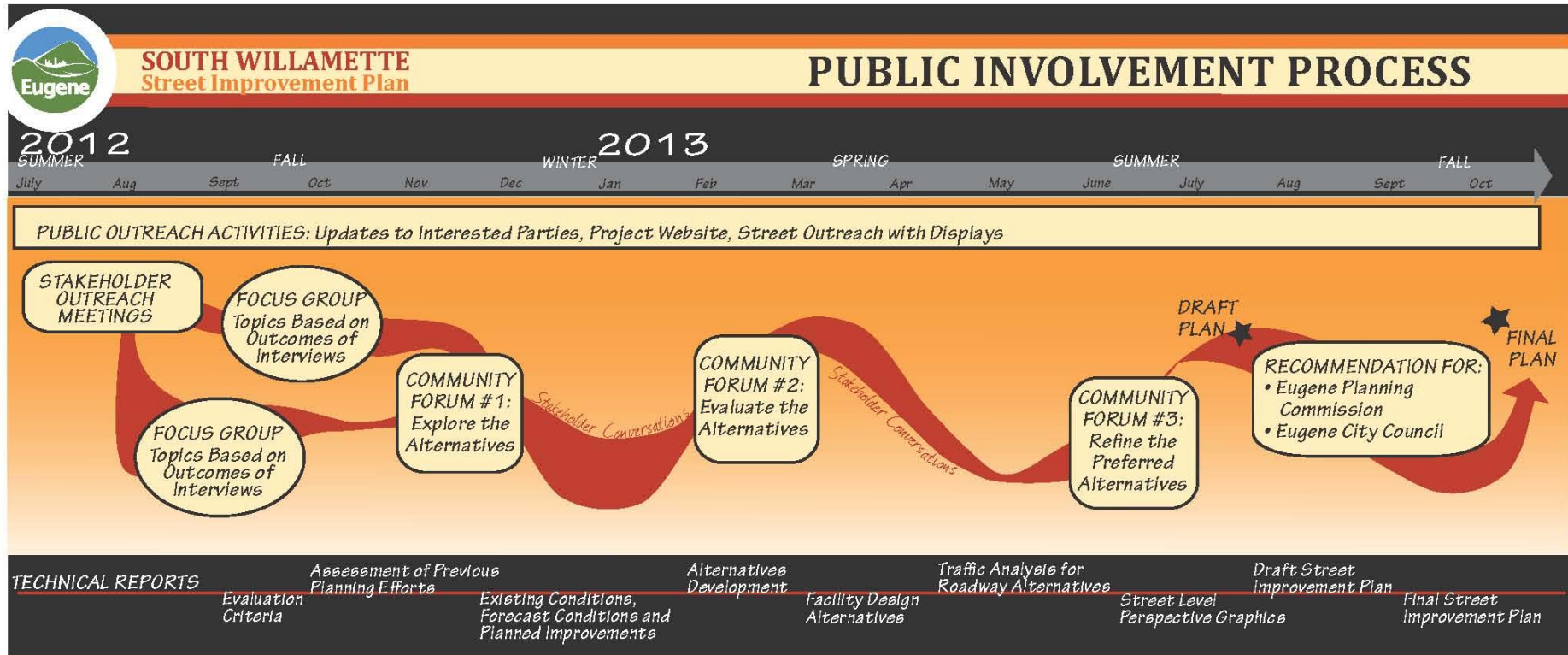


# Context





# Project Schedule and Outreach



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# Alternatives Overview



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# Alternatives Development Process

## Stakeholder Outreach

- Conversations with business and property owners, residents, and thru-users from the south, east, and west of Willamette (August & February)

## Community Concerns

- Community Forum #1 “Explore the Alternatives” (November)

## Committee Feedback

- Technical Advisory Committee (November & January)

## Elected/Appointed Official Oversight

- Planning Commission Meeting (November)
- City Council Meeting (January)



# Alternatives Screening

## Tier 1:

- Evaluation of community priorities
- Identification of broad level tradeoffs
- Assessment using qualitative tool (scoring criteria)

## Tier 2:

- More details and rigorous analysis of the designs (e.g., traffic analysis)

Tier 1: 6 alternatives → 3 alternatives

Tier 2: 3 alternatives → Draft Plan (preferred alternative)





# Study Corridor



- 24<sup>th</sup> Avenue to near 29<sup>th</sup> Avenue (North)
- “Transition Zone” near 29<sup>th</sup> Avenue intersection
- 32<sup>nd</sup> Avenue to near 29<sup>th</sup> Avenue (South)

# Terminology

- Capacity
- Right of Way
- Multimodal
- Sharrows
- Transition Zone



# Alternatives Description

- Six Alternatives: all apply north of 29th Avenue
- 29<sup>th</sup> Avenue 'transition zone' will be designed for continuity
- No ROW expansion beyond existing 60'
- Existing curb-to-curb width (41'-42') is retained, except in two alternatives that require curb reconstruction



# Alternative Cross-Sections

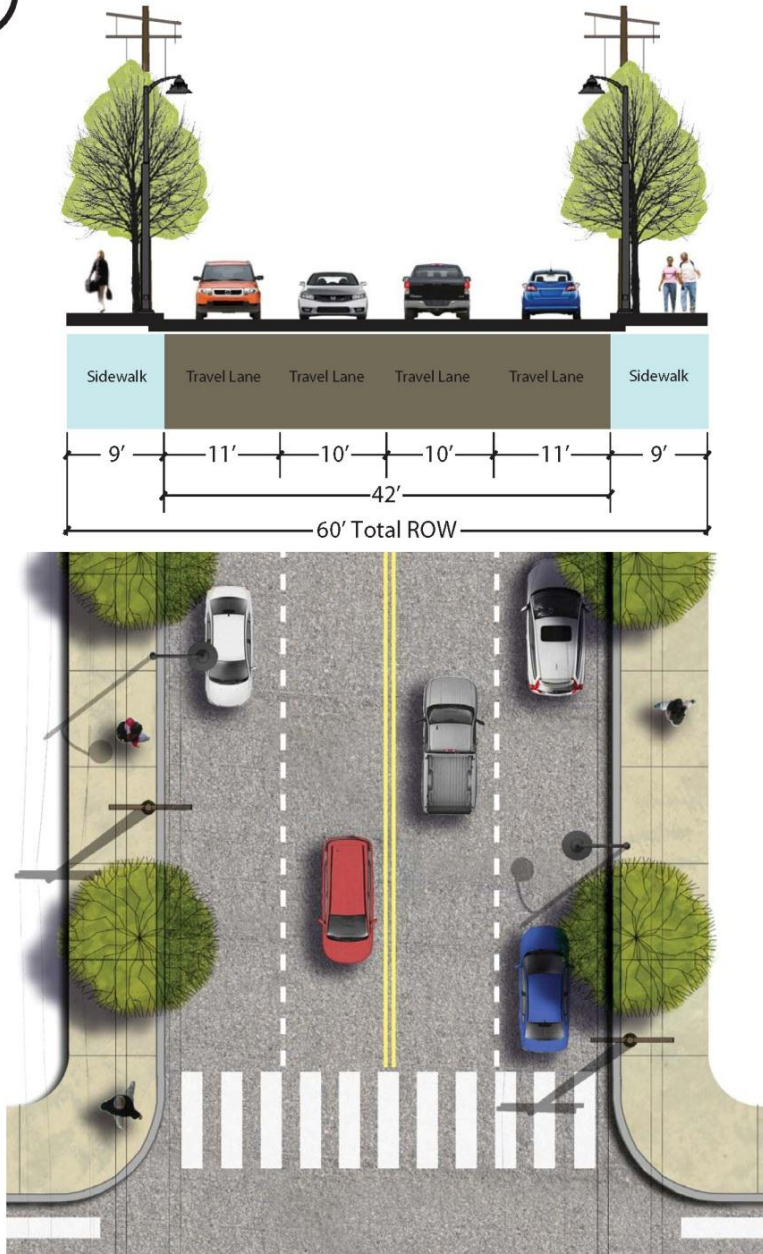


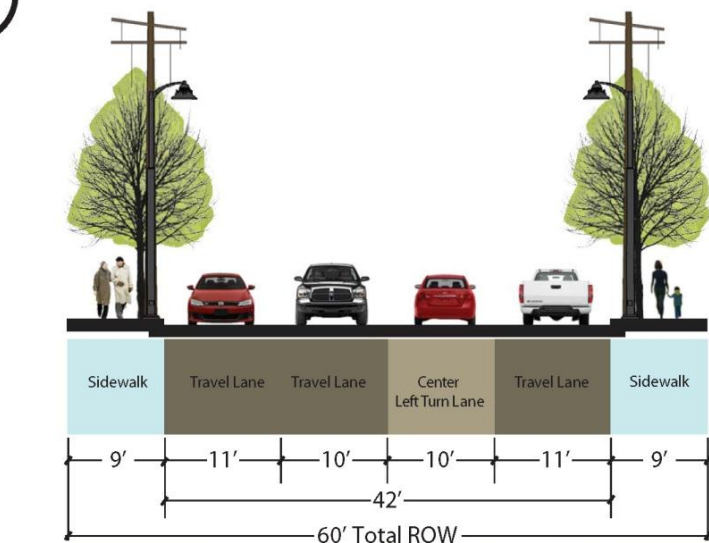
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# 4-Lane

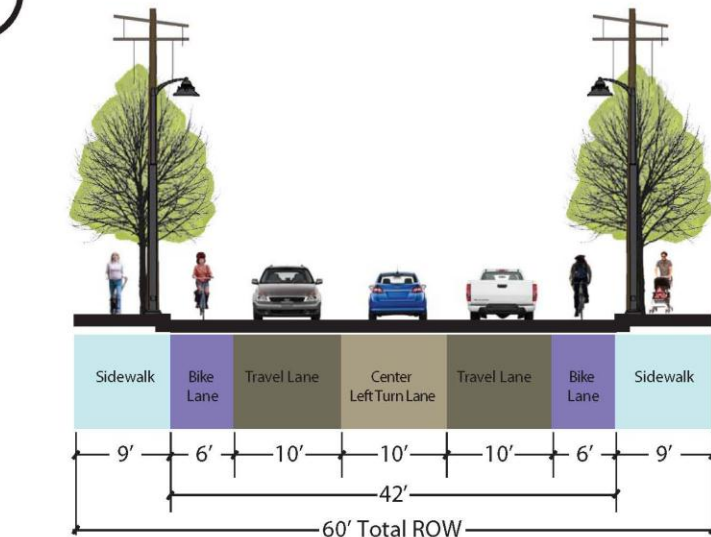
- Maintains existing 4 travel lanes
- Left-turning vehicles block travel lanes
- 9' sidewalks
- No bike lanes
- May add bike sharrows
- Maintains 11' outside travel lane for buses
- Relatively low cost to maintain current cross-section
- Only applicable north of 29<sup>th</sup> Avenue





# 4-Lane with Center Left Turn Lane

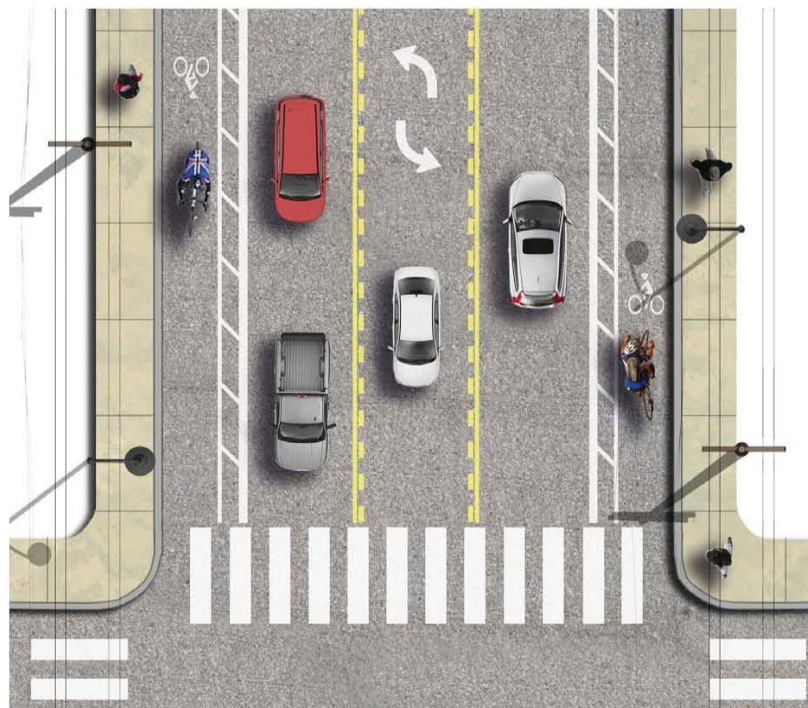
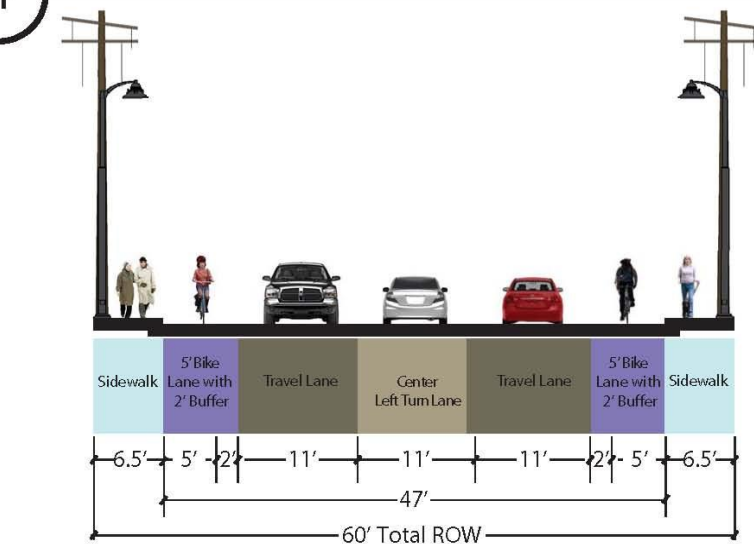
- 4 travel lanes (2SB, 1NB, 1 center)
- Convert NB lane to center turn lane
- Improves motor vehicle access during PM period, when commercial traffic is highest.
- Southbound capacity increases
- Northbound capacity decreases
- 9' sidewalks
- No bike lanes
- May add bike sharrows
- Maintains 11' outside travel lane for buses
- Relatively low cost to convert NB lane
- Only applicable north of 29<sup>th</sup> Avenue



## 3-Lane with Bike Lanes

- 3 travel lanes (1 SB, 1 NB, 1 center)
- Travel time increases north of 29<sup>th</sup> Avenue
- 9' sidewalks
- Bike lanes
- 10' travel lanes are narrow for buses and trucks
- Center turn lane offers opportunities for design treatments
- Moderate cost to provide center left turn lane and bike lanes
- Intersections and traffic signals would need to be reconfigured





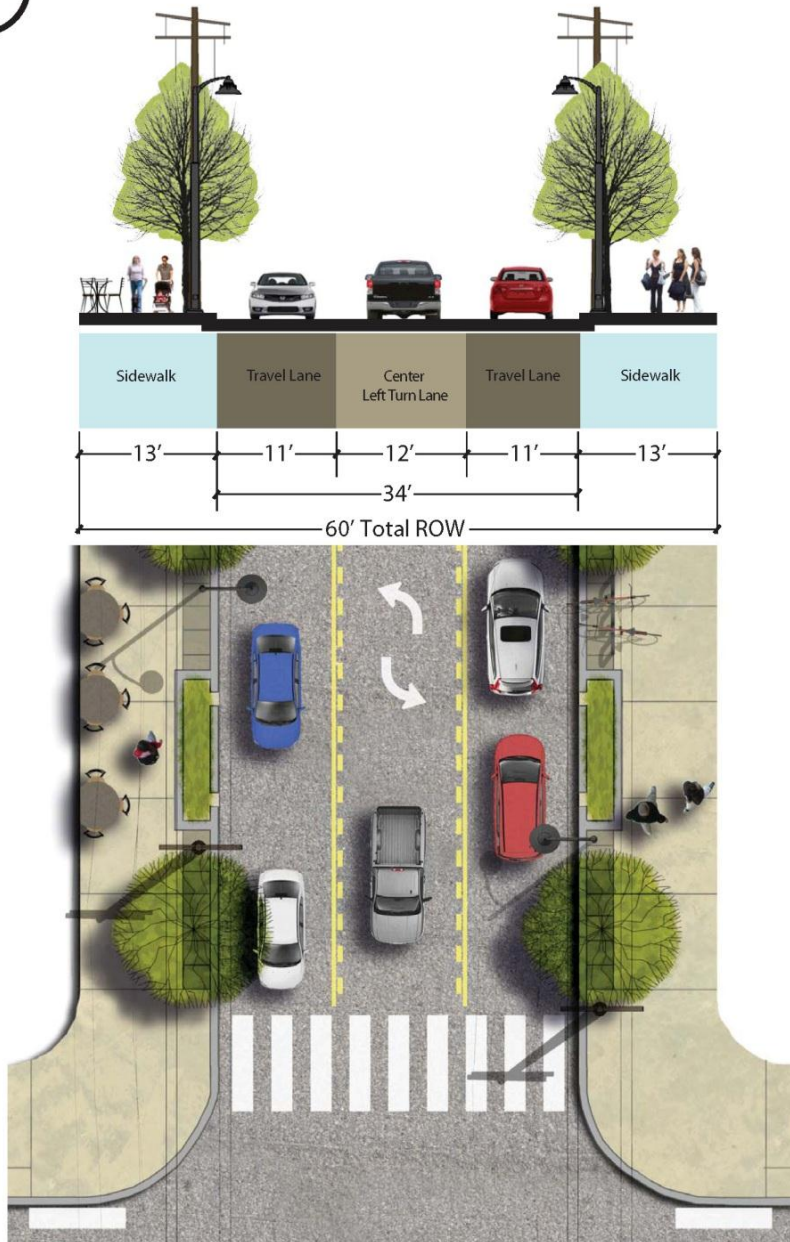
## 3-Lane with Buffered Bike Lanes

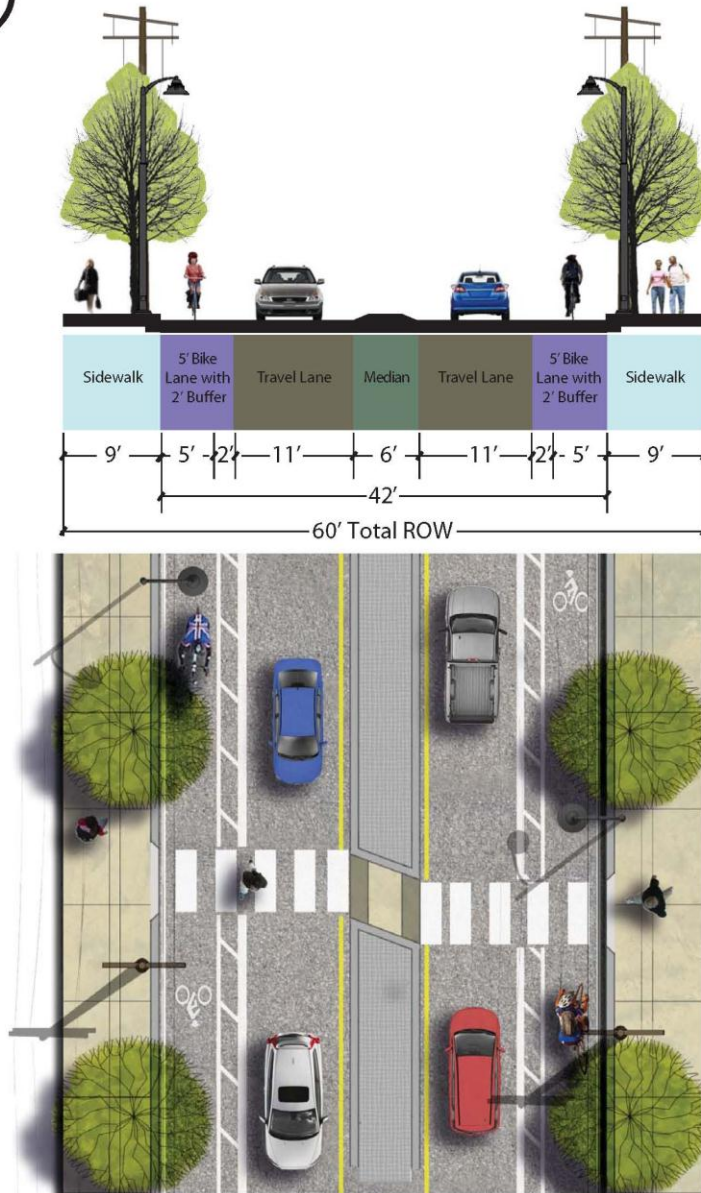
- 3 travel lanes (1 SB, 1 NB, 1 center)
- Travel time increases north of 29<sup>th</sup> Avenue
- 6.5' sidewalks
- Narrow sidewalks limit design treatment options
- Buffered bike lanes (5' with 2' buffer)
- Maintains 11' outside travel lane for buses
- Center turn lane offers opportunities for design treatments
- High cost to reconstruct curbs
- With reconstruction, utilities should be relocated for ADA compliance
- Intersections and traffic signals would need to be reconfigured



# 3-Lane with Wide Sidewalks

- 3 travel lanes (1 SB, 1 NB, 1 center)
- Travel time increases north of 29<sup>th</sup> Avenue
- 13' sidewalks
- Wide sidewalks provide design treatment options
- No bike lanes
- Maintains 11' outside travel lane
- Center turn lane offers opportunities for design treatments
- High cost to reconstruct curbs
- With reconstruction, utilities should be relocated for ADA compliance
- Intersections and traffic signals would need to be reconfigured
- Only applies north of 29<sup>th</sup> Avenue





## 2-Lane with Bike Lanes, Median, & Roundabouts

- 2 travel lanes
- Motor vehicle capacity decreases
- Median would restrict driveway turns to right-in-right-out
- Property impacts to construct roundabouts
- 9' sidewalks
- Buffered bike lanes (5' w/2' buffer)
- Maintains 11' travel lane for buses
- Heavy vehicle/bike conflict potential
- Mountable raised median offers opportunities for pedestrian crossings or design treatments
- High cost to construct median and roundabouts

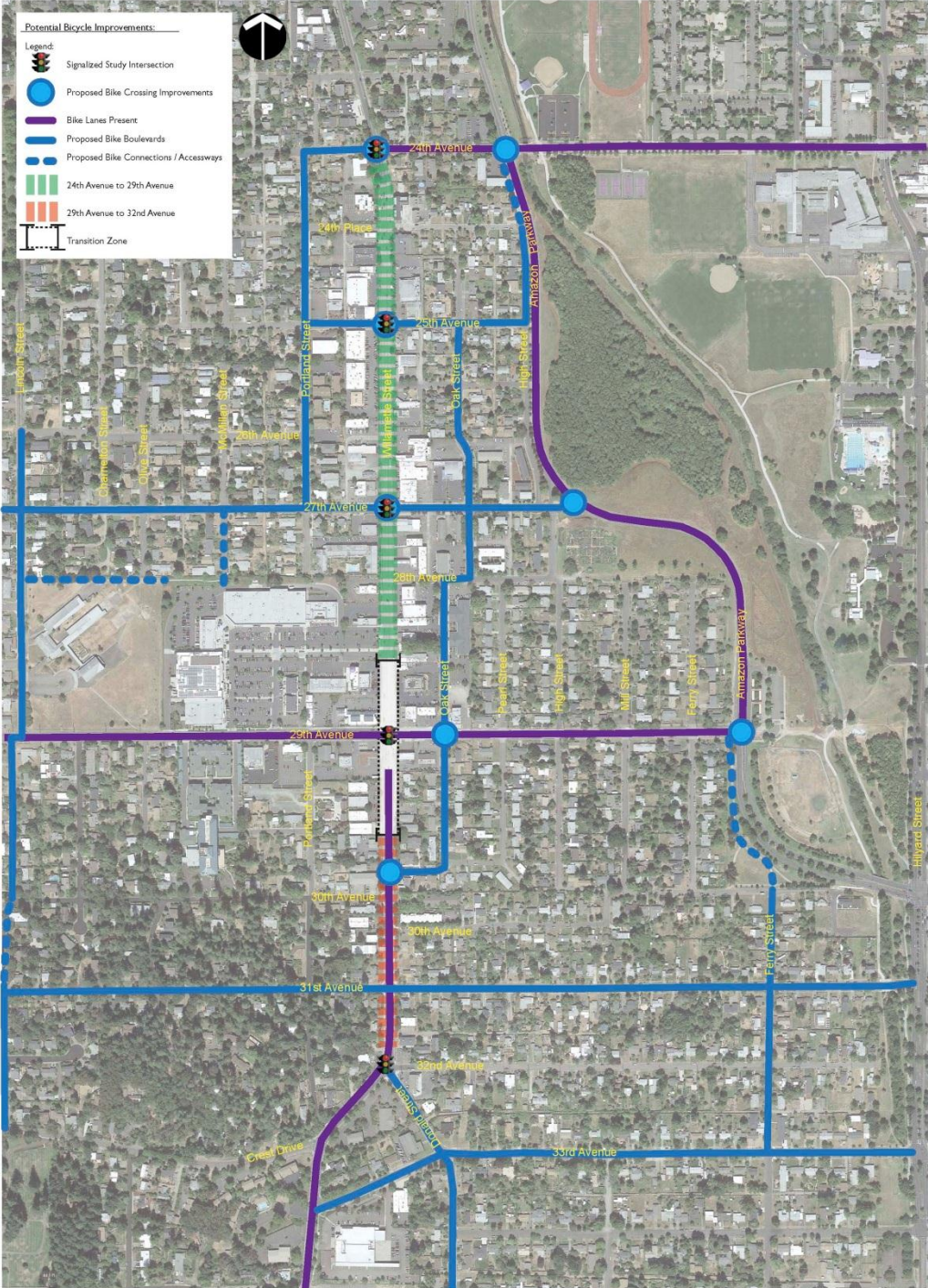
# Tier 2 Additional Design Elements



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# Existing and Proposed Nearby Bicycle Routes

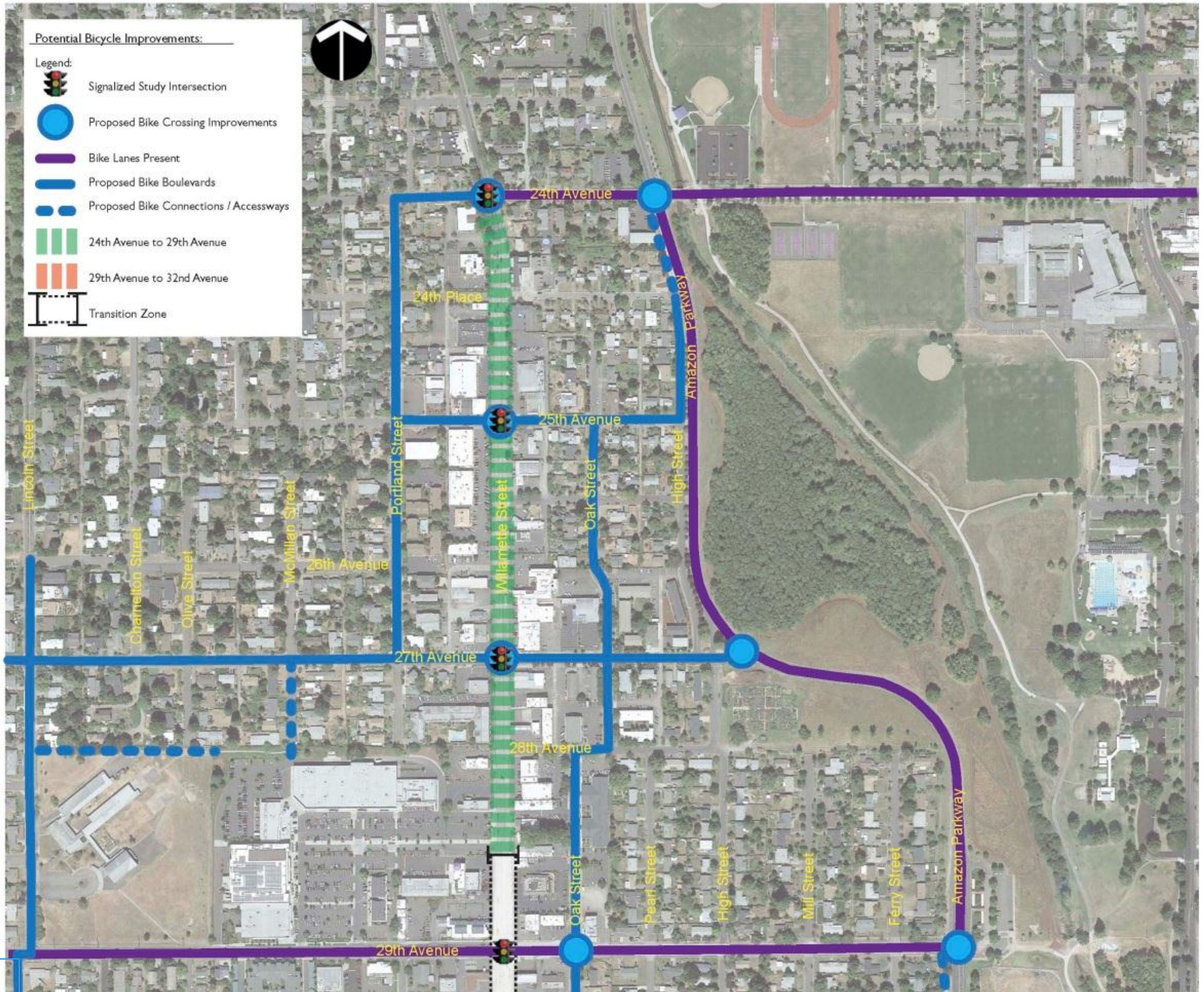




# Potential Bicycle Improvements:

## Legend:

-  Signalized Study Intersection
-  Proposed Bike Crossing Improvements
-  Bike Lanes Present
-  Proposed Bike Boulevards
-  Proposed Bike Connections / Accessways
-  24th Avenue to 29th Avenue
-  29th Avenue to 32nd Avenue
-  Transition Zone





# Enhance Sidewalk Environment

- Widen Sidewalks
- Stormwater Treatments
- Utility Relocation
- Street Lighting
- Bike Parking
- District Signing
- Landscaping/Vegetation



# Enhance Pedestrian Crossings

- Medians
- Flashing Lights
- Curb Extensions
- Signing
- Striping



# Driveway Consolidation

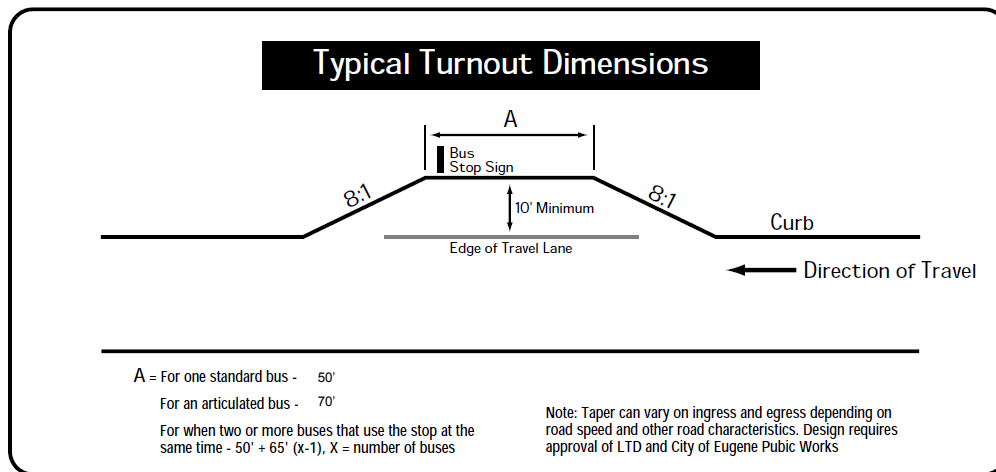
- Over 70 driveways in study area
- Access regulation is a “high priority” for minor arterials
- Combine driveways
- Reduce conflict points
- Improve business circulation and parking opportunities
- Balance access and mobility





# Transit Amenities

- Bus Shelters
- Bus Turnouts



LTD Standards and Design



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# Screening Criteria Evaluation



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# Screening Criteria Evaluation

- Developed to support decision-making process
- 8 goal categories defined
  - Access & Mobility
  - Safety & Health
  - Social Equity
  - Economic Benefit
  - Cost Effectiveness
  - Climate & Energy
  - Ecological Function
  - Community Context
- Based on Draft Transportation System Plan & South Willamette Concept Plan



# Screening Evaluation Findings

- Relatively similar scoring for all alternatives, except Alternative 4 (3-lane with Buffered Bike Lanes)
- Alternative 4 scored poorly for narrow sidewalk environment (pedestrian accessibility criteria, etc.) due to ROW constraints



# Next Step



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# Tier 2 Screening

For 3 Alternatives Selected:

- Corridor Design Concept Illustrations
- Traffic Analysis (future year congestion, queueing, travel times)
- Multimodal Measures (motor vehicle, pedestrian, bicycle, transit)
- Right-of-way Impacts
- Cost Estimates



# Group Discussion



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